

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference 2032642PC/ko | FOR FURTHER ACTION See Form PCT/IPEA/416 | |
| International application No. PCT/FI2004/000714 | International filing date (<i>day/month/year</i>) 25-11-2004 | Priority date (<i>day/month/year</i>) 27-11-2003 |
| International Patent Classification (IPC) or national classification and IPC See Supplemental Box | | |
| Applicant Uponor Innovation AB et al | | |

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| 1. | This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. |
| 2. | This REPORT consists of a total of <u> 5 </u> sheets, including this cover sheet. |
| 3. | This report is also accompanied by ANNEXES, comprising: <div style="margin-left: 20px;"> a. <input type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of _____ sheets, as follows: <div style="margin-left: 20px;"> <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. </div> </div> <div style="margin-left: 20px;"> b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions). </div> |

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| 4. | This report contains indications relating to the following items: <div style="margin-left: 20px;"> <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application </div> |
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| Date of submission of the demand 22-09-2005 | Date of completion of this report 27-02-2006 |
| Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88 | Authorized officer Inger Löfving / JA A Telephone No. +46 8 782 25 00 |

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FI2004/000714

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Cover sheet

INTERNATIONAL PATENT CLASSIFICATION (IPC) :

F16L 47/16 (2006.01)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FI2004/000714

Box No. I Basis of the report

1. With regard to the language, this report is based on:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rules 12.3(a) and 23.1(b))
- ☐ publication of the international application (Rule 12.4(a))
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the claims:
- pages _____ as originally filed/furnished
- pages* _____ as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the drawings:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FI2004/000714

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | | |
|-------------------------------|--------|-------------|-----|
| Novelty (N) | Claims | <u>1-16</u> | YES |
| | Claims | | NO |
| Inventive step (IS) | Claims | <u>1-16</u> | YES |
| | Claims | | NO |
| Industrial applicability (IA) | Claims | <u>1-16</u> | YES |
| | Claims | | NO |

2. Citations and explanations (Rule 70.7)

The invention relates to a pipe fitting.

Reference is made to the following document/documents:

D1: US 3502355 A1
D2: AU 3518171 A1
D3: US 2484644 A1
D4: US 3856065 A1
D5: US 4154466 A1

The principal document D1 (col. 4 line 52-col.5 line 5, fig.7-10) describes a pipe connection system with a driving section within a threaded aperture with longitudinal ribs.

Document D2 (fig. A) shows a foot valve with a thread and it seems to be protrusions on the bottom of a groove.

Document D3 (fig.1-3) describes a self-locking and sealing screw. See also document D4.

The principal document D5 shows a pipe fitting with the thread arranged at a distance from the end of the pipe fitting that act as a guide surface.

By studying the search report one would get the impression that documents D1-D5 anticipate the invention according to claims 1-16, but the cited documents lack important features, namely, the pipe fittings according to claim 1 differs from document D1 in that the threaded aperture have protrusions on

.../...

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: BOX V

bottom of the groove, and claim 10 differs from document D5 in that the thread is arranged at a distance from the end of the pipe fitting so that the unthreaded suction acting as a guide surface. The invention according to claims 1 and 10 is therefore novel.

The invention according to claims 1 and 10 is not obvious and is therefore considered to involve an inventive step.

There is no reason to doubt the industrial applicability of the claimed pipe fitting.

Consequently the dependent claims 2-9 and 11-16 also satisfy all three criteria

All documents in the search report should be categorized "A" instead of "X" and "Y".